

**Notes and Descriptions of Some Lycid-like
Neotropical Lepturine Cerambycidae**
(Coleoptera)

JOHN A. CHEMSAK AND E. G. LINSLEY

University of California, Berkeley, California

The genus *Megachoriolaus* was proposed by Linsley (1970) for a Mexican species with lycid-like coloration. At the same time a number of other species were transferred to this genus from *Euryptera*, all of which are probably also mimetic. In 1971 Linsley and Chemsak added two of Bates' species and described one additional new species. Subsequent collections have yielded a number of additional new species which are described below because of their possible significance in Neotropical mimetic complexes.

During the study of the *Euryptera-Megachoriolaus* complex (Linsley and Chemsak, 1971), a paper by Fuchs (1956) was inadvertently overlooked. In this publication, three new species of *Euryptera* were described and other species previously included in the genus were characterized. Judging by the original description, *E. unilaticollis* Fuchs is probably assignable to *Euryptera* as defined by Linsley and Chemsak; *E. rotundipennis* Fuchs to *Choriolaus* Bates; and *E. brasiliensis* to *Mimiptera* Linsley.

The National Science Foundation through grant #GB-4944X is gratefully acknowledged.

GENUS MEGACHORIOLAUS Linsley

Megachoriolaus Linsley, 1970, Pan-Pac. Entomol., 46:128; Linsley and Chemsak, 1971, Arq. Zool., 21:3.

Type species: *M. chemsaki* Linsley, by original designation.

All of the known species of this genus fall into one of two color types, yellow and black or red and black. Since few of the mimicry models are known, the significance of these patterns remains to be determined. The yellow and black species are: *chemsaki* Linsley; *breviceps* Linsley; *spiniferus* Linsley; *patricia* (Bates); *filicornis* Linsley and Chemsak; and *unicolor* (Bates). The red and black species include: *flammatu*s Linsley; *ignitus* (Schaeffer); *sabinoensis* (Knull); *imitatrix* Linsley; *cruentus* (Martin); *texanus* (Knull); and the four new species described below.

Megachoriolaus lineaticollis, new species

FEMALE: Form moderate sized, elytra slightly expanded posteriorly; elytra dark Nopal red (Ridgeway, 1912), pronotum red orange except for broad, median, longitudinal black band, vertex with a black band extending onto neck, appendages black, prosternum black at sides, mesosternum orangish on coxae and mesosternal process. Head with vertex impressed behind antennal tubercles, finely, confluent punctate, pubescence fine, dense, recumbent; front moderately elongate, ratio of distance between apices of antennal tubercles and line midway between them and apex of labrum, 1.0:1.8; antennal tubercles shallow, very finely punctate to large glabrous median triangle, pubescence fine, rather dense, depressed; clypeus with a few irregular punctures at base; labrum with a few setiferous punctures; genae finely punctate; antennae extending to about middle of elytra, segments to base of fifth shining, clothed with coarse black hairs, outer segments opaque, poriferous areas absent, segments from fifth thickened, third shorter than first, fourth shorter than third, fifth longer than third but shorter than first. Pronotum densely, rather finely punctate except for vague linear area at center behind middle; pubescence dense, reddish, appressed; sides sinuate, posterior angles acutely produced over humeri; prosternum subglabrous, shallowly impressed before coxae; mesosternum with intercoxal process extending to level of coxae, abruptly declivous in front; metasternum very finely, shallowly punctate, finely pubescent. Elytra about 2.2 as long as width across humeri; punctures very fine, dense, separated by about one puncture diameter; pubescence dense, long, reddish, subdepressed; apices shallowly emarginate truncate, outer angles strongly dentiform. Legs with posterior tarsi shorter than tibiae, first segment as long as remainder of tarsus; femora slender, densely, shallowly punctate. Abdomen very densely punctate except at middle; last sternite subtruncate at apex. Length, 13 mm.

Holotype female (United States National Museum) from VOLCAN DE CHIRIQUI, 1000 M., PANAMA. (Friedr. Tippmann, Wien).

This is the only known species of reddish *Megachoriolaus* with a black pronotal band. The rather fine dense punctation of the pronotum and the dense pubescence of the elytra also make this species distinctive.

Megachoriolaus nigricollis, new species

MALE (?): Form moderately robust, elytra subparallel, slightly tapering toward apices; integument black, elytra almost Nopal red (Ridgeway, 1912). Head with vertex vaguely impressed on each side of midline, punctures vague, pubescence dense, golden, appressed; front elongate, narrow, ratio of distance between apices of antennal tubercles and line between them and apex of labrum, 1.0:2.3; antennal tubercles not prominent, minutely shallowly punctate, median glabrous triangle large; clypeus finely punctate at base, labrum with several small punctures at sides; genae very finely, sparsely punctate; antennae extending to about apical one-third of elytra, segments to fourth shining, remainder opaque, segments from fifth thickened, poriferous areas vague on outer segments, third segment slightly shorter than first, fourth shorter than third, fifth equal to third. Pronotum moderately densely punctate, punctures a little larger than those of elytra; pubescence red-orange, dense, depressed; sides sinuate; posterior angles acute, extending over humeri; prosternum finely punctate over apical $\frac{1}{2}$, pubescence very sparse; mesosternum with intercoxal process broad, protruding slightly above level of coxae,

abruptly declivous in front; metasternum glabrous at middle, sides and margins very finely, densely punctate, pubescence sparse. Elytra a little more than twice as long as broad; punctures rather fine, well separated; pubescence moderately dense, suberect, reddish; apices slightly obliquely truncate, outer angle obtusely dentate. Legs with posterior tarsi about as long as tibiae, first segment as long as remainder together; front tibiae densely pubescent internally; femora moderately densely clothed with bronze pubescence externally. Abdomen very finely, densely punctate at sides, glabrous at middle, last sternite almost all punctate, apex very broadly emarginate, angle dentate. Length, 13–16 mm.

Holotype male (?) (California Academy of Sciences) and six male (?) paratypes from 30 MILES NE TEHUANTEPEC, OAXACA, MEXICO, 8 July, 1955 (Derham Giuliani).

No other known species of *Megachoriolaus* has the entire body except the elytra black. The type series shows no variation in this color pattern and all specimens are very similar. In addition to the black head and pronotum, the characteristics of the head, mesosternum and abdomen will separate *M. nigricollis* from other species.

This species has no obvious secondary sexual characters.

***Megachoriolaus celestae*, new species**

(Fig. 1)

MALE (?): Form moderately robust, elytra subparallel before tapering at apices; elytra a scarlet Brazil red (Ridgeway, 1912), head and pronotum orangish, mouthparts, antennae, eyes, legs and most of underside black, abdomen often partially pale. Head with vertex shallowly impressed on each side of midline, finely, confluent punctate, finely clothed with brownish depressed pubescence; front elongate, ratio of distances between apices of antennal tubercles and line midway between them and apex of labrum, 1.0:2.3; antennal tubercles prominent, minutely opaquely punctate to large glabrous median triangle, pubescence very dark, brownish, depressed; clypeus rather coarsely, shallowly punctate over basal $\frac{2}{3}$, apex impunctate, labrum impunctate; genae minutely, vaguely punctate; antennae extending to about apical one-third of elytra, basal segments to middle of fifth shining, rather sparsely clothed with coarse, suberect black setae, outer segments opaque, minutely densely punctate and pubescent, poriferous areas of outer segments small, third segment slender, about as long as first, fourth slender, shorter than third, segments from apex of fifth very slightly thickened, fifth about as long as third, eleventh bluntly tapering at apex. Pronotum very densely, moderately coarsely punctate except for median impunctate line; pubescence dense, subdepressed, colored similarly to elytra; sides sinuate, posterior angles acute, extending over humeri; prosternum impunctate, very sparsely clothed with very short pubescence; mesosternum very finely, densely punctate, moderately densely clothed with short, depressed, bronze pubescence, mesosternal process lying below surface of coxae, gradually arcuate anteriorly; metasternum finely densely punctate, moderately densely pubescent. Elytra about twice as long as broad; punctures fine, dense, separated by about two puncture diameters; pubescence dense, rather short, subdepressed, colored as surface; apices obliquely truncate, outer angles dentiform. Legs with posterior tarsi slightly shorter than tibiae, first segment longer than

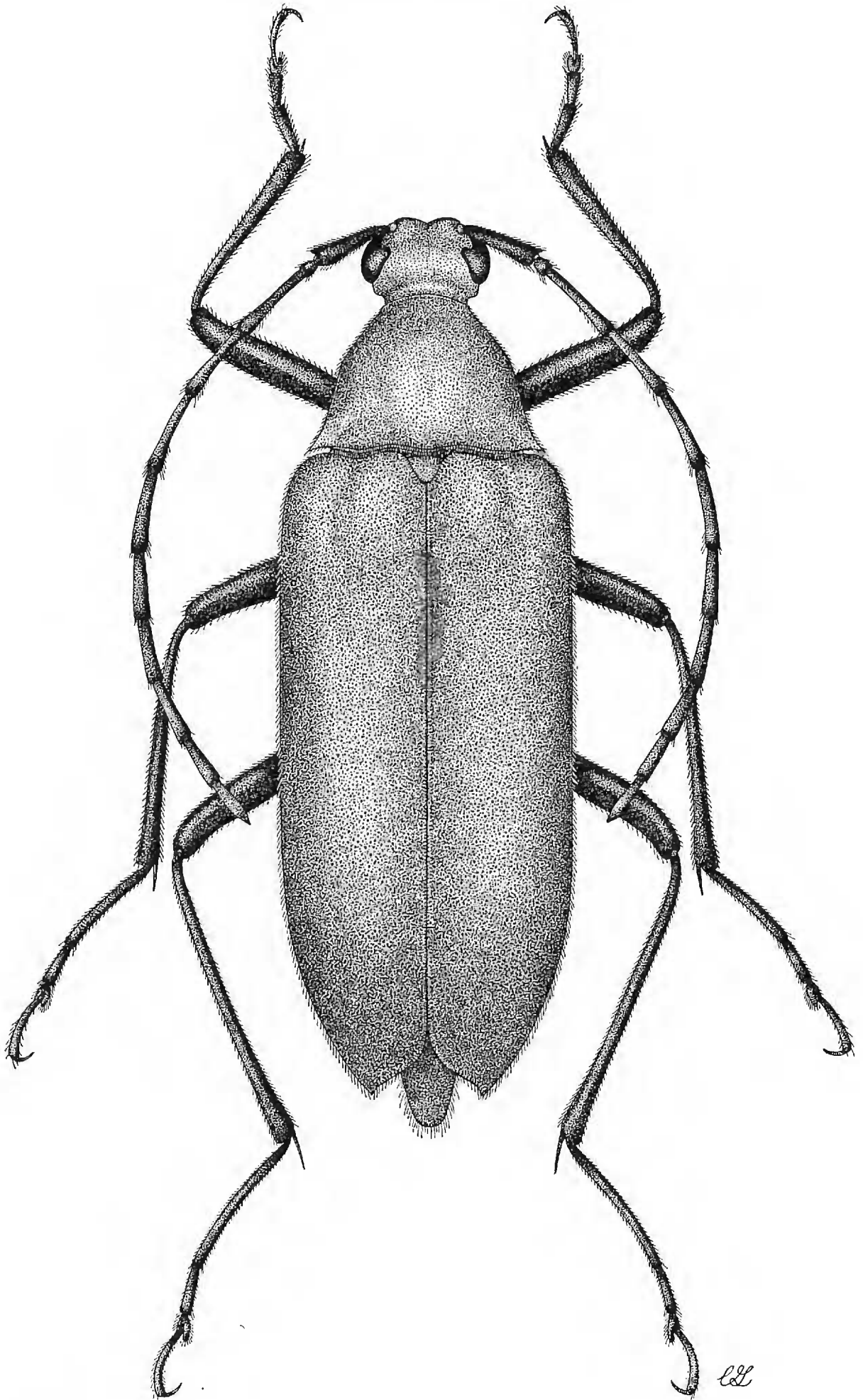


FIG. 1. *Megachoriolaus celestae* Chemsak and Linsley.

remainder of tarsus; femora finely densely punctate externally, densely clothed with short, dark and golden pubescence. Abdomen shining, finely densely punctate basally, less densely at middle toward apex; last sternite narrowly rounded at apex. Length, 13–15 mm.

Holotype male (?) (California Academy of Sciences) from SE SIDE OF CERRO TRES PICOS, Montane rain forest, 1524-1829 M., CHIAPAS, MEXICO, 25 May 1972 (D. E. Breedlove); one male (?) paratype from N. slope of Cerro Bola, N. Cerro Tres Picos, 1524-2134 m., Chiapas, Mexico, 5 May 1972 (D. E. Breedlove).

M. celestae is very distinctive by the unique scarlet red coloration of the elytra; none of the other reddish species of *Megachoriolaus* has this particular hue. The species also differs by the non-expanded elytra and form and color of the head. Of the other red-headed species, *M. ignita* (Schaeffer) has the pronotum more coarsely punctate; *M. imitatrix* Linsley has shorter antennae and sinuate-truncate elytral apices, and *M. sabinoensis* (Knull) has a much shorter front of the head.

As in most species in this genus, there are no apparent secondary sexual differences. It is equally possible that both our specimens may be females or that both sexes are represented. The shape of the apex of the last abdominal sternite in *M. celestae* is quite unlike most other species which have the apex emarginate truncate and the angles dentate.

We take pleasure in dedicating this beautiful species to Celeste Green in appreciation for the preparation of the illustrations which accompany this and many of our prior publications.

***Megachoriolaus gracilis*, new species**

MALE (?): Form moderate sized, slender, tapering posteriorly; tips of mouthparts, eyes, antennae, tarsi, tibiae except bases of front pair, hind femora at apical one-half, middle femora at apical one-third, and front pair narrowly at apices, black, elytra approaching Nopal red (Ridgeway, 1912) in color, head, pronotum, underside and parts of femora orangish. Head with vertex impressed behind antennal tubercles, finely confluent punctate, pubescence very fine, golden; front moderately elongate, ratio of distance between apices of antennal tubercles and line midway between them and apex of labrum, 1.0:2.2; antennal tubercles shallow, very finely, shallowly punctate to large glabrous median triangle, pubescence short, fine, subdepressed; clypeus with a few larger, shallow punctures irregularly dispersed; labrum with a few shallow setiferous punctures; genae almost impunctate; antennae almost as long as elytra, segments to middle of fifth shining, clothed with coarse black hairs at apices, outer segments opaque, poriferous areas obsolete, basal segments slender, segments from apex of fifth very slightly thickened, third a little longer than first, fourth equal to first, fifth equal to third. Pronotum moderately coarsely densely punctate except for midline behind middle; pubescence moderately dense, reddish, depressed; sides sinuate, posterior angles acute, extending over humeri; prosternum glabrous; mesosternum with intercoxal process tapering, lying below surface of coxae, very gradually arcuate anteriorly; metasternum very finely, densely punctate, densely clothed with

short depressed pubescence. Elytra a little less than two and one-half times as long as broad; punctures fine, dense, separated by about one puncture diameter; pubescence dense, moderately long, depressed, colored as surface; apices obliquely rounded, outer angles dentiform. Legs with posterior tarsi about as long as tibiae, first segment longer than remainder of tarsus; femora slender, densely punctate. Abdomen shining, finely densely punctate at side; last sternite narrowly rounded at apex. Length, 11–13 mm.

Holotype male (?) (California Academy of Sciences) from LA PACIFICA, 4 KM N.W. CANAS, GUANACASTE PROVINCE, COSTA RICA, 30 May 1972 (P. A. Opler); three male (?) paratypes with same data.

The moderately slender, tapering body form of this species makes it easily recognizable. The coloration of the body is also distinctive. In this respect there is no variation within the type series.

EURYLEMMA, new genus

Form moderately robust; elytra expanded posteriorly. Head with front short, deeply impressed transversely; palpi unequal, apical segments cylindrical; eyes small, finely faceted, deeply emarginate, upper lobes small, widely separated above; tempora prominent, elongate, parallel; antennae short, segments moderately thickened, basal segments with coarse setae at apices, poriferous areas vague, scape robust, longer than third segment, fourth shorter than third, fifth equal to first. Pronotum rather flattened, sides sinuate; hind angles acute, not extending over humeri; apex about as broad as head, basal margin broadly lobed; disk impressed at sides; prosternum narrow, deeply impressed at apex, intercoxal process slender, expanded at apex, coxal cavities partially open behind, coxae rather small; mesosternum with intercoxal process lying below surface of coxae. Elytra with broad, elevated lines; apices broadly rounded. Legs slender, short; posterior tarsi shorter than tibiae, first segment a little shorter than remainder of tarsus together. Abdomen normally segmented.

Type species: Eurylemma auricollis, new species.

This genus is apparently related to the group of genera presently referred to as the *Euryptera-Megachoriolaus* complex. It superficially resembles *Euryptera* but differs by the more slender antennae, longer tempora, broader front of the head, non-elevated mesosternal process, and the absence of dentate angles at the apex of the last abdominal sternite. The shorter front of the head, prominent tempora, shape of the pronotum, and costate elytra will distinguish *Eurylemma* from *Megachoriolaus*.

A single lycid-like species is presently known.

Eurylemma auricollis, new species

(Fig. 2)

FEMALE: Form moderate sized, depressed, elytra expanding posteriorly; integument black with a bluish overcast, pronotum broadly yellow down sides, pubescence dark, golden on head and sides of pronotum. Head with front rather short, antennal tubercles short, finely punctate; clypeus with a few scattered punctures, labrum

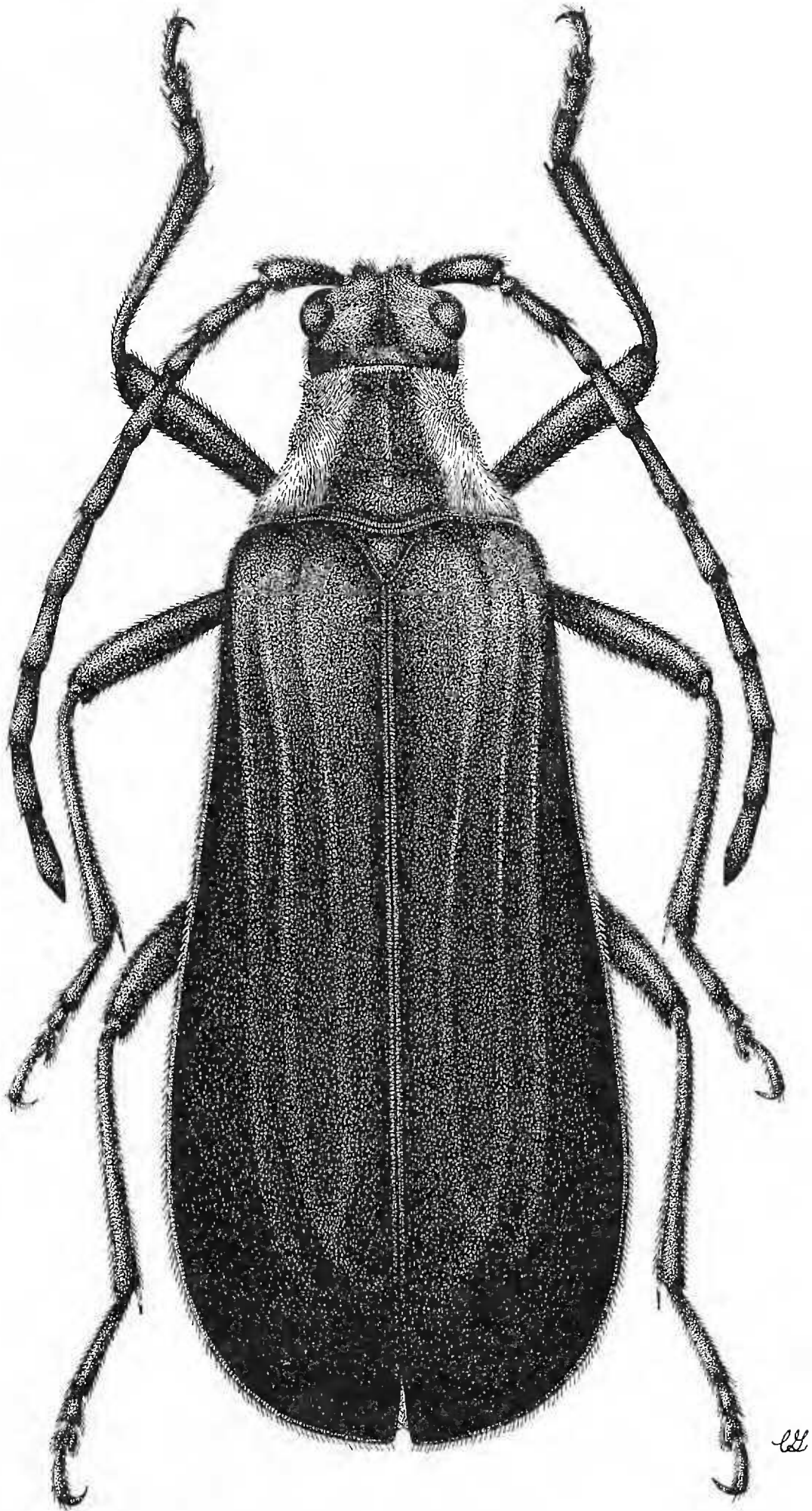


FIG. 2. *Eurylemma auricollis* Chemsak and Linsley.

almost impunctate; vertex broad, minutely punctate, each side with a band of dense, golden, appressed pubescence extending from antennal tubercles to neck; antennae extending to about middle of elytra, segments slightly thickened, segments to base of fifth shining with a metallic caste, remainder opaque. Pronotum broader than long; sides yellowish, densely clothed with golden recumbent pubescence; disk impressed at sides near base; punctures fine, contiguous, middle with a glabrous longitudinal line; pubescence at middle short, dark, depressed; prosternum vaguely punctate, pubescence sparse; meso- and metasternum very finely, separately punctate, moderately clothed with fine subdepressed pubescence. Elytra about three times as long as basal width, broadly expanding toward apices; each elytron rather strongly tricostate and with a feeble costa toward lateral margin; punctures minute, dense; pubescence short, depressed; apices broadly rounded. Legs slender, short, finely pubescent. Abdomen shining, almost glabrous; last sternite truncate at apex. Length 17 mm.

Holotype female (California Academy of Sciences) from CERRO HUIITEPEC, W. OF SAN CRISTOBAL DE LAS CASAS, 2591 M., CHIAPAS, MEXICO, 23 May, 1972 (D. E. Breedlove).

This species has a very distinctive appearance as a result of the dark integument with a bluish caste and the golden recumbent pubescence of the head and pronotum.

***Euryptera albosterna*, new species**

FEMALE: Form moderate sized, elytra strongly expanding posteriorly; color black, head with parts of front and vertex yellow orange, pronotum with two broad red bands down sides extending over humeri, humeri red, red band extending acutely back to about basal $\frac{1}{4}$, underside of head, middle of prosternum and mesosternum yellow; pubescence black on dark areas, bright red and appressed on red bands of pronotum and elytra. Head moderately elongate, ratio of distance between apices of antennal tubercles and a line midway between them and apex of labrum, 1.0:1.75; front moderately impressed, indistinctly punctate, median triangle vague, clypeus sparsely, moderately coarsely punctate, labrum sparsely, moderately coarsely punctate, pubescence fine, subdepressed; vertex plane, median line becoming a carina to neck, punctures vague, pubescence short, subdepressed; genae finely, sparsely punctate; palpi very unequal, last segment of maxillary very elongate; antennae rather stout, extending to about basal $\frac{1}{4}$ of elytra, basal segments shining, clothed with coarse black setae, segments from sixth opaque, minutely pubescent, scape conical, longer than third segment, third longer than fourth, fifth longer than third. Pronotum minutely punctate; pubescence long, appressed, colored as background; sides sinuate, hind angles acutely produced over humeri; base lobed at middle; prosternum glabrous, not impressed, intercoxal process fairly broad, rounded; mesosternum with intercoxal process broad, extending above coxae, abruptly declivous in front; metasternum minutely punctate, moderately densely pubescent. Elytra about $2\frac{1}{2}$ times as long as basal width, broadly expanding toward apices; punctures minute, dense; pubescence dense, suberect, depressed along humeral red area, sides fringed; each side of suture at basal $\frac{1}{4}$ with a strong costa terminating in a sharp spine at apical inner angle; epipleurae strongly margined; apices broadly emarginate, outer angles dentate. Legs short, slender; posterior tarsi shorter than tibiae, first segment shorter than remainder

of tarsus. Abdomen minutely, densely punctate, segments narrowly glabrous posteriorly; last segment sinuate at apex, outer angles spinose, Length, 12 mm.

Holotype female (California Academy of Sciences) from TURRIALBA, COSTA RICA, 31 January 1973 (V. M. Kirk).

This species shares most of the generic characteristics of *Euryptera latipennis* Serville, and the only relative differences of *E. albosterna* are the wider prosternal process and reduced costae of the elytra.

E. albosterna may be readily recognized among the Central American eurypteroid lepturines by the appressed and suberect pubescence of the elytra, the distinctive red and black dorsal coloration, and by the sutural costae and spines of the elytra.

We wish to thank V. M. Kirk for making this specimen available for study.

GENUS MIMIPTERA Linsley

Mimiptera Linsley, 1961, Jour. New York Entomol. Soc., 69:139. Type species: *Euryptera fulvella* Bates, by original designation.

Specimens of this genus are extremely rare in collections.

Since the genus was described only one additional example has been seen, from Hacienda Comelco, 24 Km. NW Canas, Inter-Am. Hwy., Guanacaste, Costa Rica, on flowers of *Casearia*, 16 November, 1971 (E. R. Heithaus). Based on the coloration, it would be regarded as *M. fulvella* (Bates) but structurally it is identical with *M. costaricensis* (Melzer). As in other mimetic species, such as those of the genus *Elytroleptus* (Chemsak and Linsley, 1965), *M. fulvella* apparently has more than one lycid-like color form, that is with the elytra transversely black banded or wholly yellow. *M. costaricensis* is therefore considered synonymous with *M. fulvella*.

LITERATURE CITED

- CHEMSAK, JOHN A. AND E. G. LINSLEY. 1965. A revised key to the species of *Elytroleptus* with notes on variation and geographical distribution. Pan-Pacific Entomol., 41: 193-199.
- FUCHS, E. 1956. 2. Beitrag zur kenntnis der neotropischen Ccrambyciden. Entomol. Art. Mus. G. Frey, 7: 567-576.
- LINSLEY, E. G. 1961. The North and Central American species of *Euryptera* and a related new genus. Jour. New York Entomol. Soc., 69: 131-141, 1 fig.
- LINSLEY, E. G. 1970. New genera and species in the lepturine complex related to *Euryptera* and *Choriolaus*. Pan-Pacific Entomol., 46: 128-141, 4 figs.
- LINSLEY, E. G. AND JOHN A. CHEMSAK. 1971. An attempt to clarify the generic status of some Neotropical species currently assigned to *Euryptera*, *Chontalia* and *Ophistomis*. Arq. Zool., S. Paulo, 21: 1-40.
- RIDGEWAY, R. 1912. Color Standards and Color Nomenclature. 43 pp., 53 pls.